

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A method of connecting together at least two workpieces using a blind rivet, the method comprising the steps of:

positioning the at least two workpieces in abutment;

positioning a blind side end face of a blind rivet against a first one of said workpieces and applying a biasing force thereto to maintain said rivet in engagement with said workpiece;

rotating said rivet at a speed whilst maintaining said biasing force thereon, thereby generating heat and forming heat-weakened regions in each of said at least two workpieces;

utilizing said biasing force to drive said rotating blind rivet through the resultant heat-weakened heat-weakened regions in each of said at least two workpieces; and

stopping rotation of said inserted rivet and setting said blind rivet to compress the workpieces between a deformed portion of the rivet body and a flange portion.

2. (Original) A method as claimed in claim 1 wherein said rivet is rotated at a speed of at least 200 rpm.

3. (Previously Presented) A method as claimed in claim 1 wherein said biasing force is determined to be less than that required to force the blind rivet through the non-weakened workpiece.

4. (Previously Presented) A method as claimed in claim 1 wherein said biasing force is between 2 kN and 10 kN.

5. (Original) A method as claimed in claim 4 wherein said biasing force is between 4 kN and 8 kN.

6. (Previously Presented) A method as claimed in claim 1 wherein said rivet is rotated at a speed of between 300 rpm and 1000 rpm.

7. (Previously Presented) A method as claimed in claim 1 using a blind rivet wherein said blind side end face comprises an abrasive surface.

8. (Previously Presented) A method as claimed in claim 1 using a blind rivet having a blind side end face with a workpiece engaging portion having a contact area less than the cross sectional area of the rivet.

9. (Original) A method as claimed in claim 8 using a blind rivet with a tapered or frusto-conical blind side end face.

10. (Previously Presented) A method as claimed in claim 1 wherein the step of rotating and setting the blind rivet is carried out using the same tool.

11-19. (Cancelled)

20. (New) A method as claimed in claim 1 wherein forming said heat-weakened regions in each of said at least two workpieces includes forming a first heat-weakened region in said first one of said workpieces prior to forming a second heat-weakened region in a second one of said at least two workpieces.

21. (New) A method as claimed in claim 1 wherein forming said second heat-weakened region includes conducting heat from said first one of said workpieces to said second one of said workpieces.

22. (New) A method as claimed in claim 1 using a blind rivet having a parabolically curved blind side end face disposed co-axially with a longitudinal axis of said rivet and wherein position said blind side end face includes positioning an apex of said parabolically curved blind side end face against said first one of said workpieces.

23. (New) A method as claimed in claim 1 using a blind rivet having an elongated cylindrical projection extending co-axially from a frusto-conical end face and wherein positioning said blind side end face includes positioning said elongated cylindrical projection against said first one of said workpieces.

24. (New) A method as claimed in claim 1 using a blind rivet having an open-ended rivet body with said blind side end face formed on a mandrel head extending beyond said rivet body.
25. (New) A method as claimed in claim 1 using a blind rivet having a closed-end body with said blind side end face formed on said closed end of said rivet body.
26. (New) A method as claimed in claim 7 wherein said abrasive surface comprises a coating of abrasive material.
27. (New) A method as claimed in claim 1 using metallic workpieces.
28. (New) A method as claimed in claim 1 using plastic workpieces.
29. (New) A method as claimed in claim 1 using a plastic workpiece and a metallic workpiece.